CSO Alliance
Maritime Cyber SECURITY THROUGH COMMUNITY

CONNECT : INFORM : TALK : ACT

integrated, secure, self-service, analytical, multimedia, multichannel, multidevice

Crime Fighting – Reality

NCA
National Crime Agency

NCA Strategic Cyber Industry Group

Cyber Crime Assessment 2016

Need for a stronger law enforcement and business partnership to fight cyber crime

7 July 2016

Commuters must be the 'eyes and ears' in fight against terror, police warn in new 'See IT. Say It. Sorted' campaign

NICK MURRAY | Tuesday 1 November 2016 | 🔲 comments

15

Promoting improvements in policing to make everyone safer

HMIC

PEEL: Police efficiency

An inspection of the Police Service of Northern Ireland 1–5 February 2016

Cyber Crime cannot be dealt with by Governments alone

The Public must become involved

Greater need to engage with the public to prevent harm

Crime Fighting Solutions within Community

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MARITIME

Crime Fighting Challenges drive a need for
- increased awareness by 'targets'
- improved incident reporting by 'targets'
- greater vigilance by 'targets'
- faster notification of 'targets'
- stronger collaboration with partners and targets
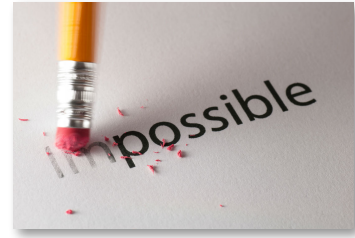
Ultimately
- greater automation to combat
  crime is undoubtedly necessary

A first Step: CSO Alliance

CSO Alliance – Security Through Community

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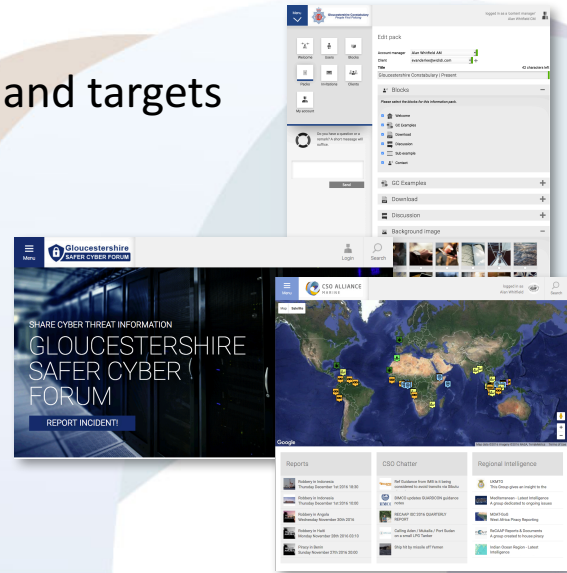
BUILT BY CSOS FOR CSOS

TAKING HUMAN INTERACTIONS ONLINE

MOBILISING THE GLOBAL COMMUNITY OF CSOS TO MORE EFFECTIVELY COUNTER MARITIME CRIME

CONNECTING
CSOS

CONFIRMING
CRIME

COMMUNICATING
AND CHAMPIONING CSO ISSUES

COLLABORATING
GLOBALLY

Security Through Community

BIMCO   NORTH   NORWEGIAN HULL CLUB   MACN   The Marshall Islands Registry

400 CSOs in 40 Countries
20 workshops throughout the world
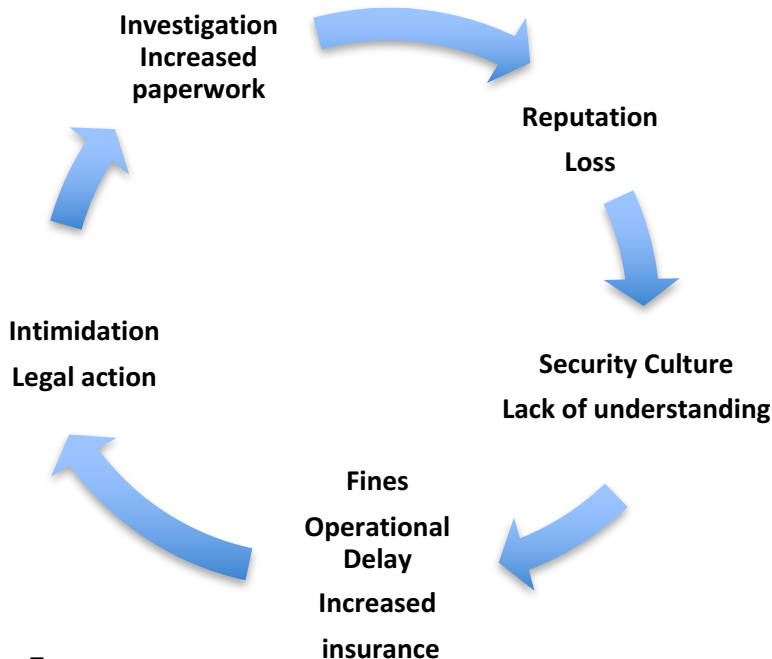One day saved equivalent to 20 years membership

Overcome Disincentives to Report Crime

Working to break the established cycle:

You did not do your job – Concerns over:

Investigation
Increased
paperwork

Reputation

Loss

Intimidation

Legal action

Security Culture

Lack of understanding

Fines

Operational
Delay

Increased

insurance

Few to trust

Limited military, National Government, NGO feedback/support

CSO Alliance provides real-time reporting to fight security threats

We Track Maritime Criminal Activity

We track and verify all crime - from Jan 2013 to this pm

10% more verified crime than Industry approved sources

Maritime criminals active in 63 countries

1636 incidents reported, 969 ships successfully boarded
60% boarding success rate affecting est. 16,000 seafarers

Industry has greatly improved reporting crime
IMB : 30% of crime is not reported, higher in W Africa
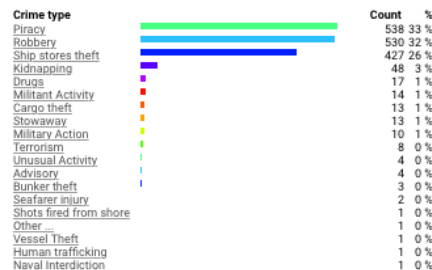
Maritime criminals are:
Global
Well organised and rewarded
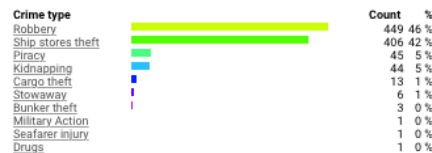Constantly innovating

Numbers since 2013

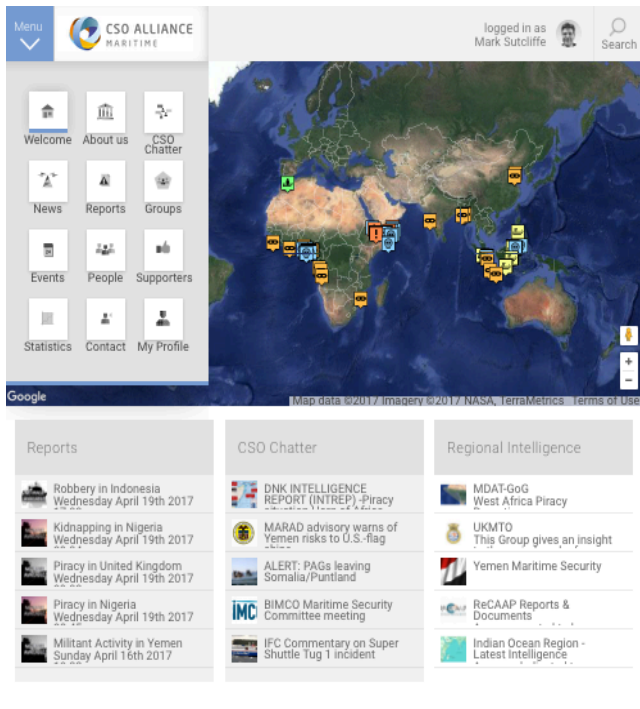Attack and Incident Reports per Crimetype

Crime type	Count	%
Piracy	538	33 %
Robbery	530	32 %
Ship stores theft	427	26 %
Kidnapping	48	3 %
Drugs	17	1 %
Militant Activity	14	1 %
Cargo theft	13	1 %
Stowaway	13	1 %
Military Action	10	1 %
Terrorism	8	0 %
Unusual Activity	4	0 %
Advisory	4	0 %
Bunker theft	3	0 %
Seafarer injury	2	0 %
Shots fired from shore	1	0 %
Other ...	1	0 %
Vessel Theft	1	0 %
Human trafficking	1	0 %
Naval Interdiction	1	0 %

Total amount of reports: 1,636

Attack and Incident Reports per Crimetype (successful boarding)

Crime type	Count	%
Robbery	449	46 %
Ship stores theft	406	42 %
Piracy	45	5 %
Kidnapping	44	5 %
Cargo theft	13	1 %
Stowaway	6	1 %
Bunker theft	3	0 %
Military Action	1	0 %
Seafarer injury	1	0 %
Drugs	1	0 %

Total amount of successful boardings: 969

A Proven Platform - Maritime Homepage

Very Easy to use

Get fast relevant and actionable information.

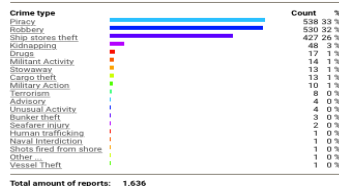Access shared experience

In complete confidence

Key Functionality

CSO ALLIANCE MARITIME

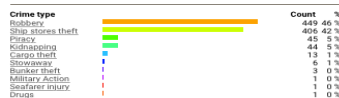## Verification & geolocation of all crime

Which Drives Statistics

Numbers since 2013

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Generates detailed report

Piracy in Somalia

Time of crime / incident

Report number	2601
UTC time	April 22nd 2017 14:42
Local time	April 22nd 2017 17:42 (UTC +3)

Location of crime / incident

Country	Somalia
GPS location	GPS 5.7, 48.883331 (N 5° 42' 0" E 48° 52' 59.9916")
Incident location	On board
Useful notes	Reported by UKMTO/IMB. Incident occurred around 6nm off Somali coast.

Vessel (where the crime / incident occurred)

Vessel	Asilah IMO-8405701
IMO number	IMO8405701
Vessel type	Chemical / Oil Products Tanker
Vessel status	Underway

Crime type

Crime type	Piracy
Contact level	Attack
Number of offenders	6
Number of vessels	1
Useful notes	Six armed persons in a skiff chased and fired upon a tanker underway. Master raised the alarm and sent distress message, to which a warship responded. The skiff chased the tanker for

Chatter – on any subject

CSO Chatter overview

DNK INTELLIGENCE REPORT (INTREP) -Piracy situation

DNK INTELLIGENCE REPORT (INTREP) -Piracy situation Horn of Africa
We are pleased to present members with this int rep from DNK on the current situation off Somalia. Members can download the PDF

MARAD advisory warns of Yemen risks to U.S.-flag ships
MARCH 28, 2017 — The U.S. Maritime Administration has issued an advisory warning that continued regional tensions in Yemen

ALERT: PAGs leaving Somalia/Puntland
Posted Monday 27th March:
As members may be aware, CSO Alliance receives intelligence

BIMCO Maritime Security Committee meeting
Would members please note that a video in which Giles Noakes briefly recaps some of the major discussion points of the recent
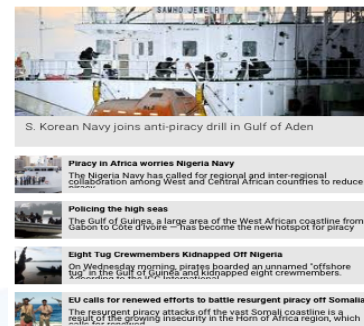
Key Functionality

Secure online conference facility

Security news

S. Korean Navy joins anti-piracy drill in Gulf of Aden

Piracy in Africa worries Nigeria Navy
The Nigeria Navy has called for regional and inter-regional collaboration among West and Central African countries to reduce

Policing the high seas
The Gulf of Guinea, a large area of the West African coastline from Gabon to Côte d'Ivoire — has become the new hotspot for piracy

Eight Tug Crewmembers Kidnapped Off Nigeria
On Wednesday morning, pirates boarded an unnamed "offshore tug" in the Gulf of Guinea and kidnapped eight crewmembers

EU calls for renewed efforts to battle resurgent piracy off Somalia
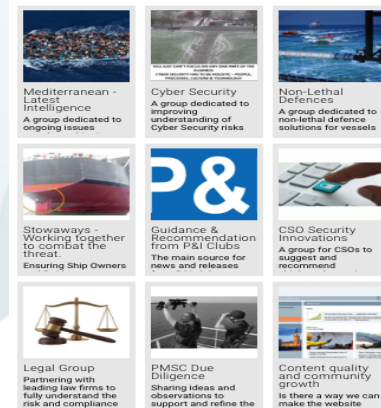The resurgent piracy attacks off the vast Somali coastline is a result of the growing insecurity in the Horn of Africa region, which

Powerful search engine

Direct Access to Military & regional reporting centres
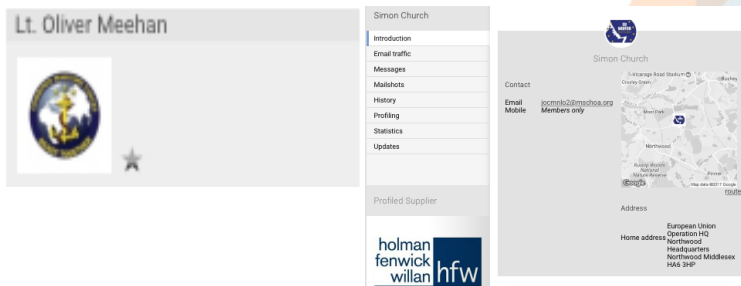
Fusion of Multiple Data & Information Feeds

Industry Support is in Place

Champions Industry BIMCO
P&I North P&I
Flag Marshall Islands Register
Class Confirm 28/4
Hull Norwegian Hull Club

Access and contact with 60 Industry bodies

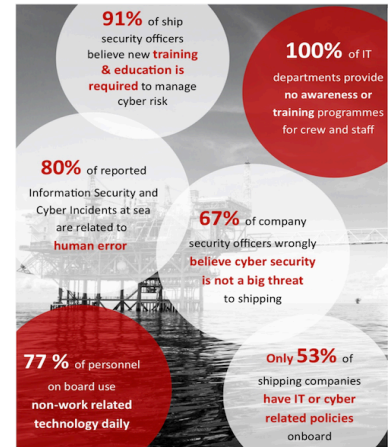| Flag States	P&I Clubs	Classifacation Society	Industry	Military & NGO Reporting
Panana	Swedish Club	American Bureau of Shipping	BIMCO	EUNAVFOR
Marshal Island	North P&I	Bureau Veritas	International Chamber of Shipping	NATO
Liberia	UK P&I	China Classifaction Sociaety	Intertanko (Tanker Owners)	UKMTO
Homg Kong	Skuld	Croatian Register of Shipping	Intercargo (Dry Cargo)	CMF
Singapore	Steamship Mutual	DNVGL	OCIMF (Oil Majors)	MDAT-GoG
Malta	Gard	Indian Register	Nautical Institute	ReCAAP
Bahamas	London P&I	Korean Register	IMO	IMB
Greece	West of England	Lloyds Register	IPTA	MARLO
China	Ship Owners	NKK (Class NK)	InterManager	US Coast Guard
Cyprus	American	Polish Register	CLIA	Interpol
	The Standard	RINA	IG P&I	Int Fusion Centre, Singapore
	Japan P&I	Russian Maritime Register	World Shipping Council	
	Britannia		Nautilus	

Cyber - What are the Problems?

Ignorance

A lack of intelligence sharing

No trusted central repository of Information

A threat of mandatory regulation

91% of ship security officers believe new **training & education is required** to manage cyber risk

100% of IT departments provide **no awareness or training** programmes for crew and staff

80% of reported Information Security and Cyber Incidents at sea are related to **human error**

67% of company security officers wrongly **believe cyber security is not a big threat** to shipping

77 % of personnel on board use **non-work related technology daily**

Only **53%** of shipping companies **have IT or cyber related policies** onboard

What was the nature of the attack?

Malware **77%**
Phishing **57%**
SpearPhishing **23%**
Application attack **9%**
Brute force **13%**
Denial of service **18%**
Network of protocol attack **14%**
Man in the middle **4%**
Theft of credentials **25%**
Known vulnerability **7%**
Other **9%**

Source: IHS Maritime & Trade
© 2016 IHS: 1017224

Cyber - Issues that Need Management
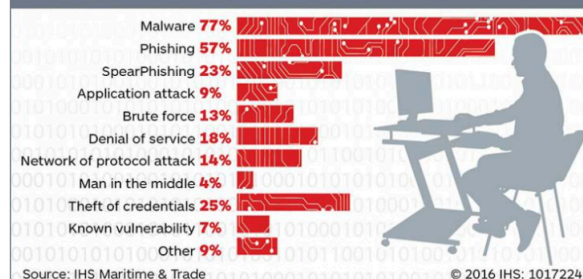
A CISO role and responsibility

Computer Emergency/Security Response Team
Disaster Recovery and Business Recovery
Identity and Access Management
Privacy
Regulatory Compliance
Risk Management
Security Operations Centre
Technology Controls
Information Technology Investigations, Digital Forensics, eDiscovery
Security Architecture

Source: 2015 Harvey Nash study of 156 UK CISO av. base salary £130,823

Ship Owners need this delivery and need to dedicate funds

Cyber - Industry Wide Requirement

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Requirement

Global consolidated cyber crime reports

Collect useful data needs a structured report

Only then identify trends and patterns

Share experiences best/poor practice

Solution

Build Cyber Crime Reporting Portal

Submit New Report

Time of crime / incident

Date	DD-MM-YY
Time	00:00
Timezone	○ Local time ● UTC time

Location of crime / incident

Country	United Kingdom
GPS location	
Incident location	○ On board ○ On shore
Useful notes	

Vessel (where the crime / incident occurred)

Vessel involved	Yes, a specific vessel was involved
Useful notes	

Crime type

Crime type	
Contact level	
Number of offenders	
Number of vessels	1
Useful notes	

Violence and weapons

Violence level	
Useful notes	

Cargo / vessel impact (in US dollars)

Bunkers theft	
Cargo theft	
Medicines	

Cyber – Benefits of Working as One

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Keep reporting voluntary or risk regulation

Create actuarial data & remove clause 380

Keep Cyber Crime data ''off market''

Share breaking data with cyber responsible employees

Support Flag & some states cyber reporting

If we don't ……. Cyber criminals will thrive on our dis-organisation

Cyber - Knowledge is Needed by All

Crew – Be cyber aware posters and awareness campaign

Office – e-learning, e-audits and education

Management – ensure full understanding

Board & shareholders – a risk that can cripple a company

The Drivers   Ignorance is no longer a defense
Effective security delivers client confidence
Can deliver competitive advantage
The threat is innovating and scalable
Malware infection acceleration Geometric
Infection into all parts of supply chain

EUNAVFOR has provided CSO Alliance with a situation report for the incident. Please note that it is not to be distributed but is for member use only. This is the first time EUNAVFOR has shared a 'story board' with CSO Alliance and illustrates how seriously they take liaison with the merchant marine on issues such as this. You can view the report by clicking here.

Please see three images below of the voyage and first location courtesy of Maritrace and several satellite images courtesy of Airbus Defence and Space 7.30 am 16 March.
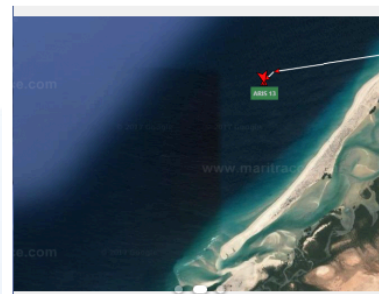
Airbus ARIS 13 Detection.pdf
PDF document 1,10 MB
March 17th 2017 05:51

We will keep you posted

In the loop (8)

Comments (9)

Latest Update Somali Pirates Hijack
"A ransom for the release of the crew has now been demanded by the pirates" - EUNAVFOR report.

Mr Mark A Long · March 15th 2017 11:53   Edit Delete

Cyber - Complete Maritime Supply Chain

To succeed - we need to work as one

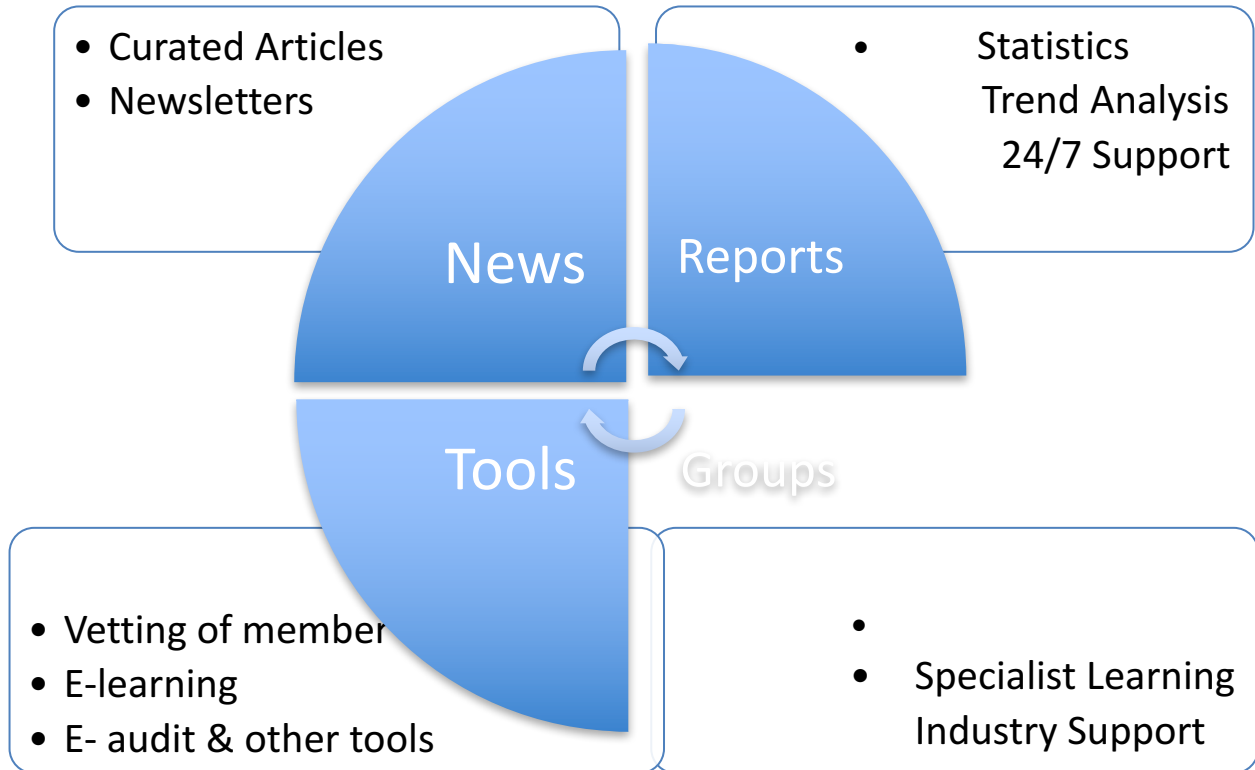|	
Ship Owners	CTO, CISO, Cyber Responsible
Ports	CTO, Cyber Responsible, PFSO
Supply Chain	Agents, Hauliers, Manufacturers
Flag States	Duty to report to IMO
Industry	BIMCO, ICS, IG Group, IACS etc

Cyber Crime Reporting Portal

WWW & Core System Ready for July

To secure a data flow anonymity of crime reporting needs to be assured

1. Gloucestershire Police 'Safer Cyber Forum'

2. Iceland Based Server Assures anonymity for all

3. Develop a cyber alliance 'ecosystem'

4. Industrial Partner – 600 FTE cyber staff

Phase 1: WWW & Core Service

- Curated Articles
- Newsletters

- Statistics
- Trend Analysis
- 24/7 Support

News

Reports

Tools

Groups

- Vetting of member
- E-learning
- E- audit & other tools

- Specialist Learning
- Industry Support

- Cyber Chatter
- Live phone call back
- Live email reply

- Deep analysis
  Emerging Trends
  Peer Group Review

News

Reports

Tools

Groups

- Support tools
  Malware analysis
- Virtual CISO Service
  CTO,CEO,CSO,CISO;
- Polling

- Extensive Groups
  Library
  Discussion

There is a job to be done - Protecting information assets and technologies

Next Steps

Join us now   This is your platform and help the build

                   Liaise with AMMITEC
                   IMO engaged

End July   **Cyber Crime Reporting portal ready**
                   www and core service soft launch
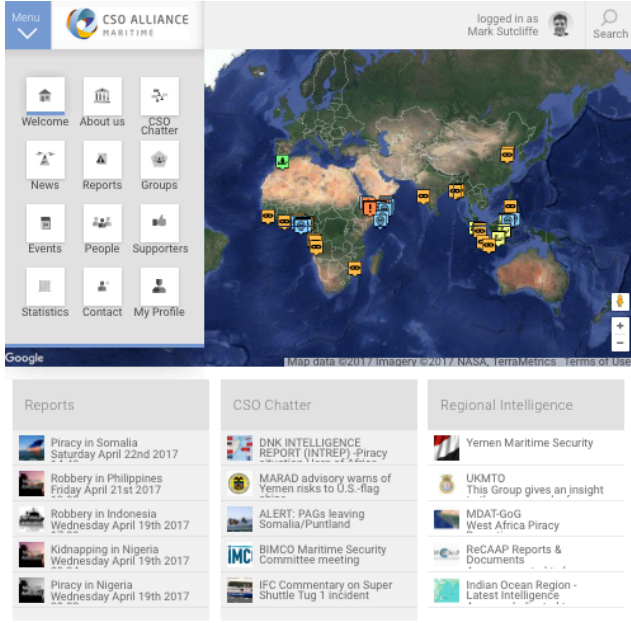
Mid September   Athens - CTO Workshop initial feedback
                   create ' your' Premium service

If your CSOs join by July, year 1 Cyber core solution for no charge

On line Demonstration

A Focus on Reports